

REMARKS

In the present application, which is a continuation application, claims 1-40 of the parent applications are canceled, without prejudice or disclaimer, and new claims 41-60 are added.

Claims 41-60 are pending.

New claims 41-60 are based on the original application as filed, for example, page 33, line 12 to page 36, line 9, in conjunction with FIGS. 25-27, in which movement of a portion of the body of the user, such as the head of the user, selects the display of the VR keyboard having groups of keys to press in virtual reality.

As described on page 34, line 10, when the user desires to view the VR keyboard, motion of a portion of the body of the user is transformed into information in the form of "a VR keyboard display signal is generated" corresponding to the step of "selecting a key group including a desired key displayed on a display viewable to the user, with the key group corresponding to information that the user desires to input by moving the predetermined body part", as recited in new claim 41. Accordingly, it is respectfully submitted that no new matter has been added.

Entry and favorable consideration of the present application including new claims 41-60
are respectfully requested.

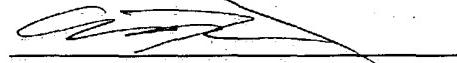
Respectfully submitted



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I hereby certify that this preliminary amendment, with the accompanying utility patent application transmittal for continuation application and associated documents are being submitted by Express Mail ET 149 288 877 US to the U.S. Patent and Trademark Office on July 12, 2003.



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ABSTRACT OF THE DISCLOSURE

~~A system and method implement a virtual reality (VR)~~

keyboard. The VR keyboard system and method receive a VR glove position, generate a corresponding key code from the VR glove position using a predetermined mapping, and send the key code to an application program as a key input corresponding to a keyboard and/or keypad entry of data and/or a command. The system and method also generate a display representing the key input based on the VR glove position. The display of the key input may include, but is not limited to, a displayed depressed key in a VR headset or a VR representation of a VR keyboard indicating the key input. The system and method implementing a virtual reality keyboard addresses and solves numerous difficulties of physical and/or hardware-based input devices and provides many diverse advantages in use and applications.

~~A system and method implement a virtual reality (VR) keyboard generated in a display device viewable to a user, with the VR keyboard simulating a physical keyboard with keys and simulating the depression of a physical key on the physical keyboard indicating a key input. The system and method address numerous difficulties of physical and/or hardware-based input devices.~~

VIRTUAL REALITY KEYBOARD SYSTEM AND METHODBACKGROUND OF THE INVENTION1. FIELD OF THE INVENTION

This disclosure relates generally to the field of virtual reality, and in particular to a system and method for performing keyboard inputs without a keyboard using virtual reality.

2. DESCRIPTION OF RELATED ART

The development of graphic user interfaces (GUIs) employing, for example, "WINDOWS" software, menu-driven software, mouse devices, and touch screens, has reduced the need for keyboard and keypad entry and for typing to enter alphanumeric data and commands into a computer and/or other computing-based devices. Such GUIs thus allow users to enter data and commands visually using visually-based windows and screens, as opposed to tactiley through a keyboard and/or keypad. However, applications using such GUIs are thus beholden to the software and software programmers to provide comprehensive windows and menus. Often, a GUI prompts the users to input data and commands through a keyboard and/or keypad by generating an input window or pop-up data entry line. Accordingly, in some instances, keyboards and/or keypads are necessities for GUI-based computer interfaces.

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is a continuation of co-pending U.S. application number 10/144,404, filed May 13, 2002, now U.S. Patent Number US 6,600,480 B2, issued July 29, 2003, which is a continuation of U.S. application number 09/223,948, filed December 31, 1998, now U.S. Patent Number US 6,388,657 B1, issued May 14, 2002, each of which are incorporated herein by reference, which claims the benefit of U.S. provisional application number 60/1070,180 filed December 31, 1997,